

## Short Safety Subject

## THE SILENT SICKNESS - CO POISONING

It's called the "silent sickness," and sometimes it becomes a "silent killer. Carbon monoxide (CO) is a common, highly flammable gas that can kill in minutes, in high concentrations. Unlike many other chemicals, carbon monoxide has no distinctive odor, taste, or appearance. Unfortunately, the symptoms of CO poisoning - nausea, headache, and dizziness - resemble other common illnesses, and can be easily mistaken for a cold or stomach flu.

**How It Poisons:** This gas produces its toxic effects when you breathe it, by replacing oxygen in the blood stream with carbon monoxide which acts on all organs in the body, especially the brain. As carbon monoxide combines with hemoglobin, less and less oxygen is carried to the tissues. Unconsciousness usually occurs when about half the hemoglobin is saturated with CO.

**How It's Produced:** Any process that involves the use of heat, oxidation, or combustion can produce carbon monoxide. Winter months can be a dangerous time for this problem. Buildings are tightly closed, and the buildup of the gas is not usually noticed by unsuspecting employees. This dangerous gas can be a problem in buildings, repair shops, and temporary weather enclosures as well as car and truck cabs if exhaust systems are malfunctioning or leaking.

**Symptoms of CO Exposure:** Symptoms to be alert for include red eyes, weakness, dizziness, headaches, and nausea. If you notice a pattern to these symptoms when engines are running in the area, carbon monoxide could be the cause. Forklifts, whether diesel, propane, or gasoline powered are significant CO producers, especially when left idling. Immediately remove anyone who is overcome from the CO exposure area. Restore breathing through CPR. Keep the person warm and resting until paramedics arrive.

**Possible Dangers At Home Too:** Be alert for symptoms of CO exposure that may be mistaken for the flu. Check for faulty heating systems or chimneys blocked by birds' nests or soot accumulation. Unvented gas room heaters or portable kerosene heaters should only be used in well ventilated areas. Never use a charcoal cooker indoors during a power outage. Keep your car tuned and check exhaust systems periodically. Do not warm up cars in a closed garage; an idling car's exhaust in an airtight, two-car garage can overcome a person in one minute. Finally, to protect your family, consider purchasing one of the new CO detectors that are now on the market.